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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Robert P. Goldman

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10/30/2006

EXAMINER

SHERKAT, AREZOO

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ART UNIT

PAPER NUMBER

2131

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/943,405	GOLDMAN ET AL.	
	Examiner	Art Unit	
	Arezoo Sherkat	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This office action is responsive to Applicant's amendment received on 8/16/2006. Claims 1-20 remain pending.

Response to Arguments

Applicant's arguments, see sections c and d of the Remarks, filed 8/16/2006, with respect to the rejection(s) of claim(s) 11-20 under 35 USC 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rothermel et al., (U.S. Patent No. 6,678,827 and Rothermel hereinafter).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3 are rejected under 35 U.S.C. 101 because:

Independent claim 1 merely recites a network reference model for use in configuring security software on a computer network "comprising a database engine providing deduction, a network information database associated with the database engine and providing a central repository for a configuration of hardware and software installed on the network, and a security goal database associated with the database engine and describing uses that the hardware and

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software installed on the network may support". Therefore, the language of claim 1 does not produce a useful tangible result.

Claims 4-10 are rejected under 35 U.S.C. 101 because:

Independent claims 4 and 10, claim "a configuration tool" which is in software. Claims limitation should instead read as "a configuration tool implemented on a computer-readable medium".

Claims 2-3 and 5-9 are dependent on rejected base claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, Applicant fails to particularly point out and distinctly claim the network reference model. Claims 2-3 are rejected on the basis of being dependent upon a rejected claim.

In claims 1, 4, and 10, the limitation "describing uses that the hardware and software of the network **may** support" renders the scope of the limitation indefinite. To convey the concept of permission, Applicant is suggested to use an alternate language such as "describing the uses that the hardware and software of the network **are permitted** to support".

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In claims 6 and 10, the limitation "**possible attacks**" renders the scope of the limitation indefinite. "possible" is a term of degree; therefore, the limitation as whole fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-3, 5, and 7-9 are dependent on rejected base claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 11-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Rothermel et al., (U.S. Patent No. 6,678,827 and Rothermel hereinafter).

Regarding claim 11, Rothermel discloses a method for configuring a security software package installed on an individual network device, the method comprising:

using active inference in a database engine (i.e., security policy manger device – Fig. 1) to decompose one or more security policies for a class of network devices into one or more security goals for the individual network device (col. 10, lines 44-65), wherein the individual network device is a member of the class of network devices (i.e., external, optional, and trusted devices based on defined networks: network 1, network 2, ...)(col. 6, lines 20-32); and

configuring the security software package (i.e., security device software 132 and 142) using the one or more security goals (i.e., NSD's specific security information)(col. 7, lines 3-56).

Regarding claim 15, Rothermel discloses a method for configuring a security software package installed on an individual network device, the method comprising:

using active inference in an object-oriented description logic database engine (i.e., security policy manger device – Fig. 1) to decompose one or more security policies for a class of network devices into one or more security goals for the individual network device (col. 10, lines 44-65), wherein the individual network device is a member of the class of network devices(i.e., external, optional, and trusted devices)(col. 6, lines 20-32); and

configuring the security software package using the one or more security goals, wherein the security software package is selected from the group consisting of an intrusion blocking software package and an intrusion detecting software package (col. 7, lines 25-56).

Regarding claims 12 and 16, Rothermel discloses the method of claim 11, wherein using active inference further comprises automatically classifying the individual network device based on an IP address (col. 11, lines 62-67 and col. 12, lines 1-10), a network topology and one or more services the individual network device provides, and applying rules to the individual network device based on its classification (col. 10, lines 65-67 and col. 11, lines 1-45).

Regarding claim 13, Rothermel discloses the method of claim 11, wherein the database engine is an object-oriented description logic database engine (i.e., although the Rothermel is silent about it, the GUI disclosed by his system can well be implemented in an object-oriented language such as Java) (col. 12, lines 14-67 and col. 13, lines 1-20).

Regarding claim 14, Rothermel discloses the method of claim 11, wherein the security software package is selected from the group consisting of an intrusion blocking software package an intrusion detecting software package (col. 7, lines 25-56).

Regarding claims 17, Rothermel discloses a method for configuring a security software package, the method comprising:

defining one or more security policies for a class of network devices (i.e., security policy templates can be viewed as defining levels of trust given to various specific devices or classes of devices), wherein the security software package is a service running on at least one network device of the class of network devices (i.e., security device software 132 and 142)(col. 6, lines 20-32);

using a database engine (i.e., security policy manger device – Fig. 1) providing deduction to decompose the one or more security policies for the class of network devices into one or more security goals, using a database engine providing deduction to associate the one or more security goals with the at least one network device (i.e., combining the security policy template 300 with the network profile 310 for network 1 to create the security policy 315 for network 1)(col. 10, lines 24-65); and

configuring the security software package (i.e., security device software 132 and 142) on the at least one network device using the one or more security goals (i.e., NSD's specific security information)(col. 7, lines 3-56).

Regarding claim 18, Rothermel discloses a method for configuring security software packages, comprising:

generating a first database containing a configuration of hardware devices and software packages installed on a network (i.e., security policy templates -

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element 113 on storage 11), wherein the software packages include the security software packages (col. 6, lines 54-67);

defining classes of hardware devices installed on the network (i.e., security policy templates can be viewed as defining levels of trust given to various specific devices or classes of devices), automatically classifying each of the hardware devices into one of the classes of hardware devices using a database engine (i.e., security policy manager device 110) providing deduction (col. 6, lines 7-54);

generating a second database (i.e., network security information log) containing first security goals (col. 7, lines 57-67 and col. 8, lines 1-27);

decomposing the first security goals (i.e., security policy templates) into second security goals (i.e., NDS-specific security policy information) for individual hardware devices using the database engine and the configuration of the hardware devices and the software packages installed on the network (col. 10, lines 8-24); and

configuring the security software package (i.e., security device software 132 and 142) on the at least one network device using the second security goals (i.e., NSD's specific security information)(col. 7, lines 3-56).

Regarding claim 19, Rothermel discloses the method of claim 18 wherein generating a second database containing first security goals further comprises generating a second database containing first security goals for each class of hardware devices (col. 7, lines 57-67 and col. 8, lines 1-27).

Regarding claim 20, Rothermel discloses the method of claim 19 wherein decomposing the first security goals for individual hardware devices further comprises using inference to associate the second security goals with individual hardware devices within each class of hardware devices (i.e., the rules in security policy 315 for network 1, which are to be implemented in network 1, specifically refer to network elements within network 1. In this sense, they differ from the rules in security policies 325 and 335, which specifically refer to network elements within networks 2 and 3, respectively)(col. 10, lines 8-24).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A.S.

Patent Examiner
Group 2131
October 26, 2006

**CHRISTOPHER REVAK
PRIMARY EXAMINER**

